## LAMPSHADE ASSEMBLY

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

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The invention relates to a lampshade assembly, more particularly to a lampshade assembly that can be assembled with relative ease.

# 2. Description of the Related Art

Referring to Figure 1, a conventional lampshade 1 is shown to include a unitary frusta-conical shell. Since the shell is not designed to permit disassembly thereof, the lampshade 1 is bulky, thereby resulting in increased packing and transport costs.

Referring to Figures 2, 3, 4 and 5, in order to overcome the shortcomings of the aforesaid prior art, a conventional lampshade assembly 2 has been proposed heretofore. The lampshade assembly 2 includes a plurality of shade members 21, an anchoring member 22, a plurality of rigid covering strips 23, and a plurality of clip members 24.

The anchoring member 22 includes an upper anchoring part 221, a lower anchoring part 223, an intermediate annular part 222 mounted between the upper and lower anchoring parts 221, 223, a resilient element 224 mounted between the upper and lower anchoring parts 221, 223 and through the intermediate annular part 222, and three ribs 225 extending radially from the upper anchoring part 221, the intermediate annular part 222,

and the lower anchoring part 223 respectively and connected to the upper edge of an inner side of a corresponding one of the shade members 21.

Each rigid covering strip 23 is made of metal, and includes a strip body 231 having lower and upper end portions, a hook 232 formed at the lower end portion of the strip body 231, a clip 233 pivotally mounted at the upper end portion of the strip body 231. In use, the strip bodies 231 of the covering strips 23 are disposed on outer sides of an adjacent pair of the shade members 21 to conceal side edges of the latter. The hooks 232 and the clips 233 on the covering strips 23 retain the same on the corresponding pair of shade members 21. In addition, each of the clip members 24 is generally U-shaped, and interconnects removably the side edges of an adjacent pair of the shade members 21 at the inner sides of the adjacent pair of the shade members 21.

Although the size of the conventional lampshade assembly 2 can be reduced to result in lower packaging and transport costs, it has the following shortcomings. When the conventional lampshade assembly 2 is assembled from the state shown in Figure 3 to the state shown in Figure 2, the upper anchoring part 221 is required to be pressed laboriously toward the lower anchoring part 223 to overcome the resilience of the resilient element 224, and to be rotated relative to the lower anchoring part 223 in order to engage anchoring hooks 227 of the

upper anchoring part 221 with anchoring blocks 226 of the lower anchoring part 223. In view of the aforesaid, it is quite difficult to assemble the conventional lampshade assembly 2. Furthermore, the rigid covering strips 23 made of metal are suited for only a specific size of the shade members 21.

## SUMMARY OF THE INVENTION

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The object of the present invention is to provide a lampshade assembly that can be assembled with relative ease.

Accordingly, the lampshade assembly of this invention includes a rib retaining unit, and a plurality of shade members.

The rib retaining unit includes a lower rib retaining member and an upper rib retaining member superimposed on the lower rib retaining member. One of the lower and upper rib retaining members is formed with a coupling post. The other of the lower and upper rib retaining members is formed with a post hole that permits the coupling post to extend removably therethrough. The rib retaining unit has a periphery. At least one of the lower and upper rib retaining members has one side that confronts the other of the lower and upper rib retaining members and that is formed with a plurality of anchoring units. The anchoring units are disposed around the coupling post, are angularly spaced apart from each other, and configure the rib retaining unit with a plurality of anchoring grooves that extend in radial

inward directions from the periphery of the rib retaining unit toward the coupling post. The rib retaining unit further includes a fastening member that engages removably the coupling post for securing together the lower and upper rib retaining members.

Each of the shade members has an outer side, an inner side opposite to the outer side in a first direction, an upper edge, a lower edge opposite to the upper edge in a second direction transverse to the first direction, and a pair of side edges extending between the upper and lower edges and opposite to each other in a third direction transverse to the first and second directions. Each of the shade members further has a connecting rib that extends in the first direction from the upper edge at the inner side. The connecting rib has a distal end retained removably on the rib retaining unit in a respective one of the anchoring grooves.

The shade members are disposed adjacent to each other. The inner sides of the shade members cooperate to form a lamp containing space when the distal ends of the connecting ribs of the shade members are retained on the rib retaining unit.

### BRIEF DESCRIPTION OF THE DRAWINGS

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Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiments with reference to the accompanying drawings, of which:

Figure 1 is a perspective view of a conventional lampshade;

Figure 2 is a perspective view of another conventional lampshade assembly;

Figure 3 is an exploded perspective view of the conventional lampshade assembly of Figure 2;

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Figure 4 is a perspective view of the conventional lampshade assembly in a collapsed state;

Figure 5 is a fragmentary sectional view of the conventional lampshade assembly of Figure 2;

Figure 6 is perspective view of a lamp that incorporates the first preferred embodiment of a lampshade assembly according to this invention;

Figure 7 is an exploded perspective view of the first preferred embodiment;

Figure 8 is a partial sectional schematic view of the first preferred embodiment; and

Figure 9 is a perspective view of a lamp that incorporates the second preferred embodiment of the lampshade assembly according to this invention.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Figures 6, 7 and 8, the first preferred embodiment of a lampshade assembly according to this invention is shown to be mounted on a lamp base 3. The lampshade assembly includes a rib retaining unit 5, a plurality of shade members 4, a plurality of clip members 7, and a plurality of covering strips 6.

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The rib retaining unit 5 includes a lower rib retaining member 51, an upper rib retaining member 52 superimposed on the lower rib retaining member 51, and a fastening member 53. The lower rib retaining member 51 is formed with a coupling post 512. The upper rib retaining member 52 is formed with a post hole 521 that permits the coupling post 512 to extend removably therethrough. The fastening member 53 engages removably the coupling post 512 for securing together the lower and upper rib retaining members 51,52. The rib retaining unit 5 has a periphery 54. In this embodiment, the lower rib retaining member 51 has one side 514 that confronts the upper rib retaining member 52 and that is formed with a plurality of lower anchoring units 515. The upper rib retaining member 52 has one side 523 that confronts the lower rib retaining member 51 and that is formed with a plurality of upper anchoring units 524. The lower anchoring units 515 of the lower rib retaining member 51 are disposed around the coupling post 512, are angularly spaced apart from each other, and configure the lower rib retaining member 51 with a plurality of lower anchoring groove portions 511. The upper anchoring units 524 of the upper rib retaining member 52 are angularly spaced apart from each other, and configure the upper rib retaining member 52 with a plurality of upper anchoring groove portions 522. The lower anchoring groove portions 511 cooperate with the upper anchoring groove portions 522 define a plurality of anchoring correspondingly to

grooves 516 (best shown in Figure 8) that extend in radial inward directions from the periphery 54 of the rib retaining unit 5 toward the coupling post 512. Preferably, the coupling post 512 is threaded externally, and the fastening member 53 is formed with an internal thread 531 for threadedly engaging the coupling post 512.

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Each of the shade members 4 includes a shade body 41 formed from a looped frame wrapped with a fabric covering. Each of the shade members 4 has an outer side 411, an inner side 412 opposite to the outer side 411 in a first direction, an upper edge 413, a lower edge 414 opposite to the upper edge 413 in a second direction transverse to the first direction, and a pair of side edges 415 extending between the upper and lower edges 414,414 and opposite to each other in a third direction transverse to the first and second direction. Each of the shade members 4 further has a connecting rib 42 that extends in the first direction from the upper edge 413 at the inner side. The connecting rib 42 has a distal end 421 retained removably on the rib retaining unit 5 in a respective one of the anchoring grooves 516. Specifically, the distal end 421 of each of the connecting ribs 42 is provided with an enlarged anchoring block 43, which is screwed on the distal end 421 of each of the connecting ribs 42. Each of the anchoring grooves 516 has an enlarged end portion 517 disposed adjacent to the coupling post 512 and disposed to receive the anchoring block 43 on the distal end 421 of the

respective one of the connecting ribs 42 therein.

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The shade members 4 are disposed adjacent to each other. The inner sides 412 of the shade members 4 cooperate to form a lamp containing space 8 when the distal ends 421 of the connecting ribs 42 of the shade members 4 are retained on the rib retaining unit 5. In this preferred embodiment, the lamp containing space 8 formed by the shade members 4 has an elliptical shape.

Each of the clip members 7 interconnects removably the side edges 415 of an adjacent pair of the shade members 4 at the inner sides 412 of the adjacent pair of the shade members 4. Each of the clip members 7 is generally U-shaped and is formed with a clamping space 71 to engage the side edges 415 of the adjacent pair of the shade members 4 at the inner sides 412 of the adjacent pair of the shade members 4.

Each of the covering strips 6 is disposed on the outer sides 411 of an adjacent pair of the shade members 4 to conceal the side edges 415 of the adjacent pair of the shade members 4. Each of the covering strips 6 has upper and lower strip ends 61,62. The upper strip end 61 is foldable over the upper edges 413 of the adjacent pair of the shade members 4 and toward the inner sides 412 of the adjacent pair of the shade members 4. The lower strip end 62 is foldable under the lower edges 414 of the adjacent pair of the shade members 4 and toward the inner sides 412 of the adjacent pair of the shade members 4 and toward the inner sides 412 of the adjacent pair of the shade members 4. Each of the upper and lower strip ends

61,62 is provided with a clip unit 63 that interconnects the side edges 415 of the adjacent pair of the shade members 4 at the inner sides 412 of the adjacent pair of the shade members 4. Each of the covering strips 6 is made of a flexible material.

Referring to Figure 8, the lampshade assembly of the preferred embodiment further includes a mounting bracket 31 adapted to mount the rib retaining unit 5 on the lamp base 3. The lower rib retaining member 51 has a top side 51' formed with the coupling post 512, and a bottom side 51" formed with a threaded bore 513. The mounting bracket 31 has an upper end 31' provided with a threaded pole 311 for threadedly engaging the threaded bore 513, and a lower end 31" adapted to be retained on the lamp base 3.

During installation of the lampshade assembly, the enlarged anchoring block 43 of the connecting rib 42 of each of the shade members 4 is mounted in a corresponding one of the lower anchoring groove portions 511 of the lower rib retaining member 51. The upper rib retaining member 52 is then superimposed on the lower rib retaining member 51 so as to permit the coupling post 512 of the lower rib retaining member 51 to penetrate through the post hole 521 in the upper rib retaining member 52, to align the upper anchoring groove portions 522 of the upper rib retaining member 52 with the lower anchoring groove portions 511 of the lower rib retaining member 51, and to receive the

anchoring block 43 of each of the connecting ribs 42 in the enlarged end portion 517 of a corresponding one of the anchoring grooves 516. The fastening member 53 is then threaded on the coupling post 512 so as to secure the lower and upper rib retaining members together. The covering strips 6 and the clip members 7 are sequentially mounted in a manner as described above. Finally, the upper end 31' of the mounting bracket 31 is threadedly engaged with the threaded bore 513 in the lower rib retaining member 51, and the lower end 31" of the mounting bracket 31 is retained on the lamp base 3.

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Referring to Figure 9, the second preferred embodiment of this invention is shown to be similar to the first preferred embodiment, except that each of the shade members 4 has a rhombic shape.

While the present invention has been described in connection with what is considered the most practical and preferred embodiments, it is understood that this invention is not limited to the disclosed embodiments but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation to encompass all such modifications and equivalent arrangements.